

Amendments to the Claims

This listing of claims replaces all prior versions and listings of claims in the application:

1-15. (Cancelled)

16. **(Currently Amended)** A method for treating a mammal suffering from a localized bacterial infection, or a bacterial-related disease, or both comprising locally administering a therapeutically effective amount of a composition comprising at least one granulocyte-macrophage-colony stimulating factor (GM-CSF) polypeptide or fragment or derivative thereof having essentially the biological function and activity of the GM-CSF.

17. **(Previously Presented)** The method of claim 16, wherein the bacterial infection or bacterial-related disease is selected from periodontal disease or sinusitis.

18. **(Previously Presented)** The method of claim 17, wherein the periodontal disease is gingivitis or periodontitis.

19-20. (Cancelled)

21. **(Previously Presented)** The method of claim 16, wherein the composition is suitable for administration via injection through the mucosal lining of the gingival or by application in a periodontal pocket.

22. **(Currently Amended)** The method of claim 16, wherein the GM-CSF or fragment or derivative thereof is present in the composition in a unit dosage amount of 5 µg to 800 µg.

23. **(Previously Presented)** The method of claim 22, wherein the unit dosage amount is 50 µg to 100 µg.

24. **(Previously Presented)** The method of claim 16, wherein the composition is administered at intervals ranging from once a day to once every third week.

25. **(Previously Presented)** The method of claim 16, wherein the composition is administered a total of 1 to 3 times for a period of one week.

26. **(Previously Presented)** The method of claim 16, wherein the composition comprises a therapeutically effective amount of at least one other active ingredient.

27. **(Currently Amended)** The method of claim 16, wherein ~~the~~ GM-CSF or fragment or derivative thereof is produced by means of a recombinant expression system.

28. **(Cancelled)**

29. **(Currently Amended)** A composition for locally treating a localized bacterial infection, ~~a or~~ bacterial related disease, ~~or both~~ comprising a therapeutically effective amount of a granulocyte-macrophage-colony stimulating factor (GM-CSF) polypeptide ~~or fragment or derivative thereof~~.

30. **(New)** The method of claim 16, wherein the composition comprises at least one derivative of a granulocyte-macrophage-colony stimulating factor (GM-CSF) polypeptide having essentially the function and activity of the GM-CSF.

31. **(New)** The composition of claim 29, wherein the composition comprises a therapeutically effective amount of a derivative of a granulocyte-macrophage-colony stimulating factor (GM-CSF) polypeptide.